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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,773	10/09/2006	Yoshiro Okawa	09792909-6839	4253

26263 7590 06/12/2009  
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EXAMINER

WONG, TINA MEI SENG

ART UNIT

PAPER NUMBER

2874

MAIL DATE

DELIVERY MODE

06/12/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/599,773

**Applicant(s)**

OKAWA ET AL.

**Examiner**

TINA M. WONG

**Art Unit**

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 May 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.**

**Patent Application Publication 2002/0145695 to Kim et al.**

In regards to claims 1-3, Kim et al teaches a liquid crystal display apparatus (Figures 1A-1D) characterized in that:

display pixels (90) are located where one of a plurality of vertical signal lines (70) and one of a plurality of horizontal signal lines (20) intersect ([0040])

a shield wire (30-34) on each side of the vertical signal lines and horizontal signal lines, wherein each of the potential of the shield wires is set at a value equal to or nearly equal to a potential of a common electrode ([0040]).

But Kim et al fails to explicitly teach the equal potential of the shield wire and common electrode equate to a normally black mode. However, Kim et al does teach the shield wires to control the liquid crystal molecules. Furthermore, Kim et al teaches the shield wire and the common electrode to initially maintain equal potentials in the off state. Therefore, although not explicitly stated, it can be reasonably inferred in the Kim et al reference for one of ordinary skill in the art to have the potentials of the shield wire and the common electrode to be nearly equal in the black mode.

Kim et al also fails to explicitly teach the potential value to be set so that when a defect occurs, it is not recognized by the human eye. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have set the parameters of the potential to have prevented a recognizable defect by the human eye, since viewing a defect on the screen of a liquid crystal display is undesirable. It could block vital information intended to display on the screen and appear overall un-uniform and unsightly.

In regards to claim 4, although Kim et al does not explicitly state for the potential of the shield wire to be set at a maximum value, a minimum value or a value approximate thereto of a voltage to be applied to the display pixel in a normally white mode, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have set the potential so that the potential is on the maximum or minimum value range in order to allow the greatest amount of light to transmit for a better image quality. Furthermore, Applicant claims three different values for the potential of the shield wire to be set to. It appears that all three values would allow the device to function reasonably well. Applicant does not claim any of the

three values performs a specific task or is for any particular purpose and therefore, it does not appear that the three values are critical values as related to the apparatus.

### ***Response to Arguments***

Applicant's arguments filed 19 May 2009 have been fully considered but they are not persuasive. Applicant argues Kim et al teaches the shield wire and common electrode to maintain equal potentials in the off state only. However, the Examiner cannot locate this teaching in the Kim et al reference. Kim et al discusses the potentials in paragraph [0040] and [0041]. Neither paragraph discusses maintaining equal potentials in a specific state. Furthermore, Applicant does not specifically require the display to be in the on state in the claim language.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TINA M. WONG whose telephone number is (571)272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen-Chau Le can be reached on (571) 272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tina M Wong/  
Primary Examiner, Art Unit 2874